

CLAIMS

1. A print head comprising a print valve and a print
5 valve control means, the print valve control means
comprising a first data input line to receive print data;
memory means to store the received print data; processing
means to process the stored print data, wherein the
processing means, in use,
10 (a) divides the print data into a plurality of sub-
elements;
(b) writes each print data sub-element to respective
memory means locations within the memory means;
(c) sequentially reads each print data sub-element
15 from the memory means; and
(d) activates the print valve in accordance with the
print data sub-elements.
2. A print head according to claim 1, wherein the
20 respective memory means locations are configured such
that, in use, each memory sub-element is read from the
memory means a substantially constant time period after
the preceding memory sub-element.
- 25 3. A print head according to claim 2, wherein, in use,
the processor changes the value of the time period.
4. A print head according to any preceding claim,
wherein, in use, the print head can be rotated to a first
30 orientation.

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- 17 -

5. A print head according to claim 4, wherein, in use, the processor changes the value of the time period so that a printed image is printed at a second orientation.

5 6. A print head according to any preceding claim, wherein the memory means locations are over-written by the processor following the sequential print data read.

7. A method of printing an image with a print head, the
10 method comprising the steps of:

(a) rotating the print head to a desired angle from the vertical;

(b) generating a raster signal representing the image to be printed;

15 (c) dividing the raster signal into a plurality of sub-elements;

(d) writing each raster signal sub-element into respective memory means locations within a memory means;

(e) sequentially reading each raster signal sub-
20 element from the memory means; and

(f) printing each raster signal sub-element from a print head, the printed image having a substantially vertical orientation.

25 8. A method of printing an image, the method comprising the steps of:

(a) generating print data representing the image to be printed;

(b) dividing the print data into a plurality of sub-
30 elements;

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ART 34 AMDT

- 18 -

(c) writing each print data sub-element into respective memory means locations;

(d) sequentially reading the memory means; and

(e) printing an image by activating a print valve in
5 accordance with print data sub-element read from the memory means.

9 A method according to claim 8, wherein during step
(d) the respective memory means locations are configured
10 such that each memory sub-element is read from the memory means a substantially constant period of time after the preceding memory sub-element.

10. A method according to claim 9, wherein step (d)
15 further comprises changing the value of the time period.

11. A method according to any of claims 8 to 10, wherein the method comprises the further step of
(f) rotating the print head first orientation; step
20 (f) being performed before step (e).

12. A print head according to claim 11, wherein step (d) further comprises changing the value of the time period so that a printed image is printed at a second orientation.
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13. A method according to any of claims 8 to 12, wherein the method comprises the further step of
(g) over-writing the memory means locations following the reading of the sequential print data.

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